AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims.

1. (Previously Presented) A method for prioritizing transmission of messages from a telemetry device, the method comprising:

storing a first information element in a device log in the telemetry device;

determining whether the first information element includes a first priority level indication;

storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication;

storing a second information element in the device log;

determining whether the second information element includes a second priority level indication;

storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication;

transmitting a first message based on the first information element from the telemetry device for receipt by an operation unit; and

after transmitting the first message, transmitting a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications.

2. (Original) A method according to claim 1, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue.

3. (Original) A method according to claim 1, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication.

4. (Original) A method according to claim 1, further comprising:

determining whether a third information element absent from the device log includes a third priority level indication;

storing the third information element in a third data structure when it is determined that the third information element includes the third priority level indication; and

after transmitting the second message, transmitting a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications.

5. (Original) A method according to claim 1, further comprising:

storing a fourth information element in the device log;

determining whether the fourth information element includes the first priority level indication;

determining whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication; and

discarding the fourth information element from consideration of storage in the first data structure when the step of determining whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure.

6. (Previously Presented) A method according to claim 1, wherein the first data structure and the second data structure are stored in a dynamic memory included in the telemetry device, and the device log is stored in a flash memory included in the telemetry device.

7. (Previously Presented) A method according to claim 1, further comprising:

receiving a request for data of the telemetry device; and

transmitting a data message based on content of the device log in response to the request.

8. (Previously Presented) A telemetry device for prioritizing transmission of messages from the telemetry device, the telemetry device comprising:

a device log including a first information element and a second information element;

a first data structure, other than the device log, including the first information element which includes a first priority level indication;

a second data structure, other than the device log, including the second information element which includes a second priority level indication; and

a processor configured to determine whether the first information element includes a first priority level indication, to determine whether the second information element includes a second priority level indication, to transmit a first message based on the first information element from the telemetry device for receipt by an operation unit, and after transmitting the first message, to transmit a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications.

9. (Original) A telemetry device according to claim 8, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue.

10. (Original) A telemetry device according to claim 8, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication.

11. (Original) A telemetry device according to claim 8, wherein

the processor is further configured to determine whether a third information element absent from the device log includes a third priority level indication, to store the third information element in a third data structure when it is determined that the third information element includes the third priority level indication; and after transmitting the second message, to transmit a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications.

12. (Original) A telemetry device according to claim 8, wherein the device log includes a fourth information element, and

the processor is further configured to determine whether the fourth information element includes the first priority level indication to determine whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication, and to discard the fourth information element from consideration of storage in the first data structure when the determination of whether the first data structure includes storage

available determines that storage for storing the fourth information element is unavailable in the first data structure.

13. (Original) A telemetry device according to claim 8, further comprising:

a dynamic memory including the first data structure and the second data structure; and

a flash memory including the device log.

14. (Previously Presented) A telemetry device according to claim 8, wherein the processor is further configured to receive a request for data of the telemetry device, and to transmit a data message based on content of the device log.

15. (Previously Presented) A computer-readable medium carrying one or more sequences of one or more instructions for prioritizing transmission of messages from a telemetry device, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

storing a first information element in a device log in the telemetry device;

determining whether the first information element includes a first priority level indication;

storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication;

storing a second information element in the device log;

determining whether the second information element includes a second priority level indication;

storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication;

transmitting a first message based on the first information element from the telemetry device for receipt by an operation unit; and

after transmitting the first message, transmitting a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications.

16. (Original) A computer-readable medium according to claim 15, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue.

17. (Original) A computer-readable medium according to claim 15, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication.

18. (Original) A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:

determining whether a third information element absent from the device log includes a third priority level indication;

storing the third information element in a third data structure when it is determined that the third information element includes the third priority level indication; and

after transmitting the second message, transmitting a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications.

19. (Original) A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:

storing a fourth information element in the device log;

determining whether the fourth information element includes the first priority level indication;

determining whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication; and

discarding the fourth information element from consideration of storage in the first data structure when the step of determining whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure.

20. (Previously Presented) A computer-readable medium according to claim 15, wherein the first data structure and the second data structure are stored in a dynamic memory included in the telemetry device, and the device log is stored in a flash memory included in the telemetry device.

21. (Previously Presented) A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:

receiving a request for data of the telemetry device; and

transmitting a data message based on content of the device log in response to the request.

22. (Previously Presented) A method for prioritizing transmission of messages from a telemetry device, the method comprising:

storing a plurality of information elements in a device log in the telemetry device;

selectively storing each of a group of the plurality of information elements in one of a plurality of data structures in the telemetry device based on a priority indicator associated with each one of the information elements of the group;

selecting one of the plurality of data structures based on one of the priority indicators; and

transmitting a message including one of the information elements of the selected one of the data structures from the telemetry device for receipt by an operation unit.

23. (Original) A method according to claim 22, further comprising:

storing the plurality of data structures in a memory including the device log, when an external power source of the telemetry device fails.

24. (Previously Presented) An apparatus for prioritizing transmission of messages from a telemetry device, the apparatus comprising:

means for storing a plurality of information elements in a device log in the telemetry device;

means for selectively storing a group of each of the plurality of information elements in one of a plurality of data structures in the telemetry device based on a priority indicator associated with each one of the information elements;

means for selecting one of the plurality of data structures based on one of the priority indicators; and

means for transmitting a message including one of the information elements of the selected one of the data structures from the telemetry device to an operation unit.

25. (Original) An apparatus according to claim 24, further comprising:

means for storing the plurality of data structures in a memory including the device log, when an external power source of the telemetry device fails.